32692
Customer Number

Patent
Case No.: 54407US006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	TUMAN, SCOTT J.		
Application No.:	09/822651	Confirmation No.:	9447
Filed:	March 30, 2001	Group Art Unit	1792
Title:	WEB HAVING DISCRETE STEM REGIONS		

BRIEF ON APPEAL

Mail Stop: Appeal Brief-Patents
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P.O. Box 1450
Alexandria, VA 22313-1450

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August 15, 2008 /Irina Hass/

Date Signed by: Irina Hass

Dear Sir:

This is an appeal from the Office Action mailed on June 5, 2008, finally rejecting claims 71-79, 81-83, 85-90 and 92-115.

Fees

☒ Any required fee under 37 CFR § 41.20(b)(2) will be made at the time of submission via EFS-Web. In the event fees are not or cannot be paid at the time of EFS-Web submission, please charge any fees under 37 CFR § 1.17 which may be required to Deposit Account No. 13-3723.

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☒ Please charge any additional fees associated with the prosecution of this application to Deposit Account No. 13-3723. This authorization includes the fee for any necessary extension of time under 37 CFR § 1.136(a). To the extent any such extension should become necessary, it is hereby requested.

☒ Please credit any overpayment to the same deposit account.

A Notice of Appeal in this application was mailed on June 25, 2008, and was received in the USPTO on June 25, 2008.

Appellants request the opportunity for a personal appearance before the Board of Appeals to argue the issues of this appeal. The fee for the personal appearance will be timely paid upon receipt of the Examiner's Answer.

REAL PARTY IN INTEREST

The real party in interest is 3M Company (formerly known as Minnesota Mining and Manufacturing Company) of St. Paul, Minnesota and its affiliate 3M Innovative Properties Company of St. Paul, Minnesota.

RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any pending related appeals or interferences.

STATUS OF CLAIMS

Claims 71-79, 81-83, 85-90 and 92-115 are pending. Claims 1-70, 80, 84, 91 are canceled. Claims 71-79, 81-83, 85-90 and 92-115 stand rejected.

STATUS OF AMENDMENTS

No amendments have been filed after the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

Claims	Exemplary Support
1-70. (Canceled)	
71. A web construction comprising:	
a substrate comprising a first major side, a second major side, and an indefinite length;	page 2, line 2; examples and figures 5-7 page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric regions fused to the first major side of the substrate, wherein each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate,	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18; examples and figures 1-8

and wherein the plurality of discrete polymeric regions are located only on the first major side of the substrate, and further wherein the polymer forming the discrete patches of polymer is not present on the second major side of the substrate; and	page 4 lines 26-27; examples and figures 1,2 and 8
a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions, wherein each stem of the plurality of stems comprises a free, unattached end.	page 2, lines 5-10; examples and figures 1-8
83. A web construction comprising:	
an elastic substrate comprising a first major side, a second major side, and an indefinite length;	page 5, line 29-30; page 2, line 2; examples and figures 5-7 page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric regions fused to the first major side of the elastic substrate, wherein each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch having a perimeter that is entirely bordered by the first major side of the elastic substrate, and wherein the plurality of discrete polymeric regions are located only on the first major side of the elastic substrate, and further wherein the polymer forming the discrete patches of polymer is not present on the second major side of the elastic substrate; and	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18, examples and figures 1-8 page 4 lines 26-27; examples and figures 1,2 and 8

a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions, wherein the elastic substrate defines a localized plane, and wherein the plurality of stems are oriented at angles that are not normal to the localized plane, and further wherein each stem of the plurality of stems comprises a free, unattached end.	page 2, lines 5-10, examples and figures 1-8
94. A mechanical fastener comprising:	
a substrate comprising a fibrous surface as a first major side, the substrate further comprising a second major side;	page 2, line 2; examples and figures 5-7 page 23, line 24; page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric regions fused to the fibrous surface of the substrate such that polymer of the plurality of discrete polymeric regions is entangled with the fibrous surface of the substrate, wherein each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate, and wherein the plurality of discrete polymeric regions are located only on the first major side of the substrate, and further wherein the polymer forming the discrete patches of polymer is not present on the second major side of the substrate; and	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18; examples and figures 1-8 page 4 lines 26-27; examples and figures 1,2 and 8
a plurality of stems extending from	

each discrete polymeric region of the plurality of polymeric regions.	page 2, lines 5-10, examples and figures 1-8
109. A web construction comprising:	
a substrate comprising a first major side, a second major side, and an indefinite length;	page 2, line 2; examples and figures 5-7 page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric regions fused to the first major side of the substrate, wherein each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate, and wherein the plurality of discrete polymeric regions are located only on the first major side of the substrate, and wherein the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate or form the second major side of the substrate; and	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18; examples and figures 1-8 page 4 lines 26-27; examples and figures 1,2 and 8
a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions, wherein each stem of the plurality of stems comprises a free, unattached end.	page 2, lines 5-10, examples and figures 1-8
110. A web construction comprising:	page 5, line 29-30; page 2, line 2; examples and figures 5-7
an elastic substrate comprising a first major side, a second major side, and an	page 5, line 23; examples and figures 5-7

indefinite length;	
a plurality of discrete polymeric regions fused to the first major side of the elastic substrate, wherein the plurality of discrete polymeric regions are located only on the first major side of the elastic substrate, and wherein the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate or form the second major side of the substrate; and	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18, examples and figures 1-8 page 4 lines 26-27; examples and figures 1,2 and 8
a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions, wherein the elastic substrate defines a localized plane, and wherein the plurality of stems are oriented at angles that are not normal to the localized plane, and further wherein each stem of the plurality of stems comprises a free, unattached end.	page 2, lines 5-10, examples and figures 1-8
111. A mechanical fastener comprising:	
a substrate comprising a fibrous surface as a first major side, the substrate further comprising a second major side;	page 2, line 2; examples and figures 5-7 page 23, line 24; page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric regions fused to the fibrous surface of the substrate such that polymer of the plurality of discrete polymeric regions is entangled with the fibrous surface of the substrate, wherein	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18, examples and figures 1-8

each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate, wherein the plurality of discrete polymeric regions are located only on the first major side of the substrate, and wherein the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate or form the second major side of the substrate; and	page 4 lines 26-27; examples and figures 1,2 and 8
a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions.	page 2, lines 5-10, examples and figures 1-8
112. A web construction comprising:	
a substrate comprising a first major side, a second major side, and an indefinite length;	page 2, line 2; examples and figures 5-7 page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric regions fused to the first major side of the substrate, wherein each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate, and wherein the plurality of discrete polymeric regions are located only on the first major side of the substrate, and wherein the second major side	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18, examples and figures 1-8 page 4 lines 26-27; examples and figures 1,2

of the substrate is free of the polymer making up the plurality of discrete polymeric regions; and	and 8
a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions, wherein each stem of the plurality of stems comprises a free, unattached end.	page 2, lines 5-10, examples and figures 1-8
113. A mechanical fastener comprising:	
a substrate comprising a fibrous surface as a first major side, the substrate further comprising a second major side;	page 2, line 2; examples and figures 5-7 page 23, line 24 page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric regions fused to the fibrous surface of the substrate such that polymer of the plurality of discrete polymeric regions is entangled with the fibrous surface of the substrate, wherein each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate, and wherein the plurality of discrete polymeric regions are located only on the first major side of the substrate, and further wherein the second major side of the substrate is free of the polymer making up the plurality of discrete polymeric regions; and	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18, examples and figures 1-8 page 4 lines 26-27; examples and figures 1,2 and 8
a plurality of stems extending from each discrete polymeric region of the plurality	page 2, lines 5-10, examples and figures 1-8

of polymeric regions.	
114. A web construction comprising:	
a substrate comprising a fibrous nonwoven web, wherein the fibrous nonwoven web comprises a first major side, a second major side, and an indefinite length;	page 2, line 2; examples and figures 5-7 page 23, line 24 page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric regions attached to the first major side of the nonwoven web, wherein each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch of polymer that does not extend through the nonwoven web to the second major side of the nonwoven web, and wherein each discrete patch of polymer has a perimeter that is entirely surrounded by the first major side of the nonwoven web; and	page 4 lines 19-20; examples and figures 1-8 page 6 line 18; page 8, line 6; page 9 lines 15-18, examples and figures 1-8 page 4 lines 26-27; examples and figures 1,2 and 8
a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions, wherein each stem of the plurality of stems comprises a free, unattached end.	page 2, lines 5-10, examples, figures 1-8
115. A mechanical fastener comprising:	
a substrate comprising a fibrous nonwoven web, wherein the fibrous nonwoven web comprises a first major side, a second major side, and an indefinite length;	page 2, line 2; examples and figures 5-7 page 23, line 24 page 5, line 23; examples and figures 5-7
a plurality of discrete polymeric	page 4 lines 19-20; examples and figures 1-8

regions attached to the first major side of the nonwoven web, wherein each discrete polymeric region of the plurality of discrete polymeric regions comprises a discrete patch of polymer that does not extend through the nonwoven web to the second major side of the nonwoven web, and wherein each discrete patch of polymer has a perimeter that is entirely surrounded by the first major side of the nonwoven web; and	page 6 line 18; page 8, line 6; page 9 lines 15-18, examples and figures 1-8
a plurality of stems extending from each discrete polymeric region of the plurality of polymeric regions, wherein each stem of the plurality of stems comprises a free, unattached end.	page 4 lines 26-27; examples; figures 1,2 and 8 page 2, lines 5-10, examples, figures 1-8

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

First Ground of Rejection

Double Patenting

Claims 71-79, 81-83, 85-90 and 92-115 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-21, 285(sic) of U.S. Patent No. 6,503,855. U.S. Patent No. 6,503,855 issued from the parent application of the current application, with respect to which this is a continuation application.

Second Grounds of Rejection

§ 103 Rejections

Claims 109, 111, and 114-115 are rejected under 35 USC § 103(a) as being unpatentable over Wessels et al. (US 5,669,120).

Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are rejected under 35 USC § 103(a) as being unpatentable over Wessels et al. (US5,669,120) in view of Allen et al. (US5,547,531).

Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are rejected under 35 USC § 103(a) as being unpatentable over Wessels et al. (US5,669,120) in view of Allen et al. (US5,547,531) and Provost et al. (US5,606,781).

ARGUMENT

First Ground of Rejection
Double Patenting

Claims 71-79, 81-83, 85-90 and 92-115 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-21, 285(sic) of U.S. Patent No. 6,503,855. U.S. Patent No. 6,503,855 issued from the parent application of the current application, with respect to which this is a continuation application. Filed herewith is a terminal disclaimer under 37 C.F.R. 1.321.

Second Grounds of Rejection

§ 103 Rejections

Claims 109, 111, and 114-115 are rejected under 35 USC § 103(a) as being unpatentable over Wessels et al. (US 5,669,120).

Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are rejected under 35 USC § 103(a) as being unpatentable over Wessels et al. (US 5,669,120) in view of Allen et al. (US 5,547,531).

Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are rejected under 35 USC § 103(a) as being unpatentable over Wessels et al. (US 5,669,120) in view of Allen et al. (US 5,547,531) and Provost et al. (US 5,606,781).

Grounds Of Rejection To Be Reviewed

A. Whether claims 103, 111, 114, and 115 are unpatentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120).

B. Whether claims 71-79, 81-83, 86-90, 92-106, and 108-115 are unpatentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531).

C. Whether claims 71-79, 81-83, 86-90, 92-106, and 108-115 are unpatentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781).

D. Whether claims 85 and 107 are unpatentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781), further in view of Murasaki (U.S. Patent No. 5,643,651).

A. CLAIMS 109, 111, 114, AND 115 ARE PATENTABLE UNDER 35 U.S.C. §103(a) OVER WESSELS ET AL. (U.S. PATENT NO. 5,669,120)

The rejected claims commonly recite a plurality of discrete polymeric regions wherein each discrete polymeric region has a perimeter that is entirely bordered (or entirely surrounded, as recited in claims 114 and 115) by a first major side of the substrate (or the first major side of the nonwoven web, as recited in claims 114 and 115). These claims further require that the plurality of discrete polymeric regions are located only on the first major side of the substrate wherein the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate (or does not form the second major side of the substrate, as recited in claim 111).

These features are neither taught nor suggested by Wessels et al.

A main issue in this rejection is the limitation "**wherein the plurality of discrete polymeric regions are located only on the first major side of the substrate, and wherein the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate or form the second major side of the substrate**"

(claims 109 and 111). This limitation is being essentially ignored in the rejection by the examiner's position in the rejection of record that a polymeric region that does "**extend through the substrate to the second major side of the substrate or form the second major side of the substrate**" as taught by Wessels et al is included within this claim limitation because at some point this polymeric region becomes the substrate to which it is fused, or that the polymeric region can be parsed into two separate elements. This characterization essentially ignores the above claim limitation as it could never be fulfilled. In other words a polymeric region is interpreted as being both the polymeric region and the substrate to which it is fused satisfying both limitations.

In support of this rejection the examiner uses the rule of claim interpretation: "[i]n the absence of definition, the term '**substrate**' has been given broadest reasonable interpretation in light of the supporting disclosure" (Office Action delivered 12 December 2007, page 4, item 7, lines 5-7). This rule of claim interpretation is then used to contend that the pile core sheet S, that is embedded within the synthetic resin of Wessels et al., are together considered a "substrate" according to claims 109, 111, 114, and 115. Specifically it was stated that:

> "**a polymer film 4a** [of Wessels et al.] with embedded S can be broadly interpreted as substrate as claimed. Therefore, the polymer regions of Wessels et el. [*sic*] are **not** actually formed by forcing molten polymer *through* the substrate but formed by extruding a film 4a of a molten polymer (claimed substrate), joining the polymer film 4a with a fabric S, then forcing the **upper** portion of molten polymer 4a *through* the fabric S into cavities (See Fig. 5). As a result, the polymer of the plurality of polymeric regions in Wessels et al does not extend ***through the substrate*** 4a with embedded fabric S as shown in Figs. 4B and 4F."
> Office Action dated 12 December 2007, page 4, item 7, lines 10-16.

Wessels et al. does not, however, disclose or suggest a substrate in the form of a "film" before the polymer forming the hooks is forced through the pores of the substrate S as asserted by the Examiner. Rather, the polymer layer 4a is formed at the same time as the hooks 4b from the same extruded molten resin 4, as described in Wessels et al. (a portion of Column 7 of Wessels et al. is reproduced below).

For molding the surface fastener of this invention on the apparatus, the molten resin 4 to be continuously injected from the injection die 1 at a predetermined molten resin pressure is continuously forced into the gap between the injection die 1 and the rotating die wheel 2. At the same time, the pile core sheet S is guided with the piles being received in the annular recesses 16 of the die wheel 2, and part of the molten resin 4 penetrates into the foundation structure of the pile regions S1 at the injection-outlet side, while part of the molten resin 4 is extruded onto the circumferential surface of the die wheel 2 through the pores of the coarse mesh regions S2, filling in the hook-element-forming cavities 5*a* successively to form hook elements 4*b* as the molten resin 4 is expanded uniformly over the circumferential surface of the die wheel 2. As a result, the molten resin 4 remaining on the injection outlet of the injection die 1 and the expanded molten resin 4 are fused with the component material of the pile core sheet S to form the substrate sheet 4*a* having a predetermined thickness.

A second process also disclosed by Wessels et al. is described in the excerpt below (taken from Columns 8 and 9). Again the polymer layer (or "substrate sheet") 4a is formed at the same time as the hooks 4b from the same extruded molten resin 4.

According to the thus constructed apparatus, the molten resin 4 extruded from the extrusion nozzle 11 is introduced to the gap between the press roller 13 and the pile core sheet S, which is introduced along the circumferential surface of the die wheel 2, to be forced through the pores of the pile core sheet S to the circumferential surface of the die wheel 2 by the pressing force of the pressing roller 13. The pile core sheet S is guided with the piles being received in the annular recesses 16 of the die wheel 2, and at the same time, part of the molten resin 4 penetrates into the foundation structure of the pile regions S1 at the extrusion-outlet side while part of the molten resin 4 is extruded onto the circumferential surface of the die wheel 2 through the pores

of the coarse mesh regions S2, filling in the hook-element-forming cavities 5*a* successively to form hook elements 4*b* as the molten resin 4 is expanded uniformly over the circumferential surface of the die wheel 2. The thus molded surface fastener of this invention travels along substantially a quarter of the die wheel 2 and is then continuously removed off the circumferential surface of the die wheel 2 as positively take up by the take-up rollers 6, 7 via the guide roller 9.

Wessels et al. does not teach a polymer "film" that is separate from the hook elements 4b. Rather, Wessels et al. teaches that "substrate" 4a is formed when molten resin 4 is forced through the pores of the coarse mesh region of S2 that allow for the passage of molten resin 4 (Wessels et al., col. 6, lines 31-33). Thus, the polymer resin used to form the hook elements 4b is the same polymer resin used to form the "substrate sheet 4a" (after being forced through the mesh regions S2 of the "pile core sheet S" from the surface opposite the surface including the hook elements 4b). Hook elements 4b and the substrate sheet 4a are formed simultaneously from this same extruded polymer resin, where the "pile core sheet S" is embedded in that portion of the polymer resin forming the "substrate sheet 4a". Hook elements 4b and the substrate sheet 4a a single integral polymeric region, not separate elements. Just because Wessels et al. uses different lead lines and reference numbers to point to different features does not change the nature of the single continuous polymeric structure formed by the molten resin 4.

In contrast to Wessels et al., each of rejected claims 109, 111, 114, and 115 recites a web construction or mechanical fastener that includes, *inter alia*, a substrate having first and second major sides, and a plurality of discrete polymeric regions located only on the first major side of the substrate, wherein the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate. That is, these claims recite a substrate having discrete polymeric regions on one side of the substrate, and the polymer that forms the polymeric regions does not extend through the substrate to the side of the substrate opposite the side that includes the discrete polymeric regions. The substrate and the plurality of polymeric regions are separate elements with one fused to the other. The plurality of polymeric regions does not also form all or a part of the substrate to which it is fused.

In response to Applicants' previously-submitted arguments on this point, it was asserted by the Examiner that "patentability of a product is independent of how it is made." Applicants do not disagree with this assertion, but note that the submitted arguments addressed patentability of the unique features of the claimed invention not taught by Wessels et al. A more proper standard to apply in a situation such as this is the axiom that all of the teachings of a reference must be considered when determining patentability of claims in view of that reference. *See, e.g.*, MPEP § 2141.03(VI) (excerpt reproduced below).

> **VI. PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS**
>
> A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984) (Claims were directed to a process of pro-

As well as the rule that all claim limitations must be considered.

2143.03 All Claim Limitations Must Be **>Considered< [R-6]

** "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

When considering the teachings of Wessels et al. *as a whole*, it is clear that the only constructions taught therein cannot support the asserted obviousness rejection because in all of Wessels et al.'s constructions the polymer resin **used must be present on both major surfaces** of Wessels et al.'s knit or woven core sheet substrate S to which the polymer resin is fused. It is improper to ignore applicants claim limitation that the polymer region is only on one face of the substrate to which the polymer region is fused by asserting that at some point the polymer fused to the substrate stops being the polymer region and becomes the substrate to which it is fused. In this regard applicants have attached a copy of a recent Board decision dealing with a similar situation where a rejection based on reading a single element as constituting two distinct elements essentially read a limitation out of the claim, Ex Parte Van Gemert, Appeal No. 2007-2237, decided Nov. 2007.

It is even later admitted in the Office Action of December 12, 2007 that "Wessels et al. do not teach that a second side of the substrate is free of the polymer making up the plurality of discrete polymeric regions." Office Action, p. 5, lines 2-3, December 12, 2007. In other words, the Examiner has indicated that polymer making up the discrete polymeric regions of Wessels et al. is not present on the second major side of the knit or woven core sheet in the constructions disclosed by Wessels et al. – in direct contrast to the recitations found in claims 109, 111, 114,

and 115. This is apparently admitted in the alternative, in which case the alternative rejection of Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) is asserted.

Further the Final Office action of June 5, 2008 stated the following:

> The Examiner respectfully disagrees with this argument. First of all, rejected claims also do not recite a polymer "film" that is *separate* from the hook elements 4b". Second, Wessels et al. does show at Fig. 5 forming a substrate in the form of a "film" 4 *before* forming the hooks. Third, the polymer forming the polymeric regions does not extend *through* the substrate for at least the reason that only ***upper portion*** in only discrete regions of the formed substrate film 4 is used for forming hooks. Forth, following applicants logic, in claimed invention the molten polymer applied to a fibrous (Claim 75), porous (Claim 76), woven (Claim 77), knit (Claim 79) substrate and *pressed* (See Applicants Figs. 5-6 would extend *through* the substrate. Applicants' specification teaches also that in case when the web 10 itself contains loop structures, as claimed in claims 73, woven and non-woven fibers are used (See Published Application, P23).

This is again appears to be repeating the assertion that the polymer resin forming the hook elements 4b and the backing 4a are considered separate and distinct elements or polymeric regions.

The underlined section is apparently arguing that applicant's process is the same as that in the asserted reference and therefore in applicant's process the polymeric regions would likewise extend through the substrate. This is a new basis for rejection and clearly improper. These are product claims not process claims, if the examiner feels that the claimed product can not be formed by the described process then this would be a 112 first paragraph issue not an obviousness issue. In fact applicant's process is significantly different than that in Wessels et al. In applicant's process polymer is deposited onto a substrate without any significant pressure and there are no cavities on the opposite side of the substrate into which polymer could be forced if the polymer were applied under sufficient pressure so as to push the polymer through the substrate.

Thus, the articles taught by Wessels et al. do not and can not meet the requirements of the recited limitations in claims 109, 111, 114, and 115. As a result, Wessels et al. do not, and cannot, support a *prima facie* case of obviousness with respect to claims 109, 111, 114, and 115.

A second issue with Wessels et al. is the lack of a teaching of "**a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate**" as is required in claims 109, 111 under rejection. This limitation can also be found in independent claims 71, 83, 94, 112 and 113. Independent claims 114 and 115 recite "**wherein each discrete patch of polymer has a perimeter that is entirely surrounded by the first major side of the nonwoven web**". Wessels et al. only discloses constructions in which polymeric regions on the first and second major sides of the substrate are continuous, i.e., the continuous polymeric regions of Wessels et al. do not "have a perimeter that is entirely bordered by the first major side of the substrate" as recited in the rejected claims. *See. e.g.,* Wessels et al., Figures 3 and 6-8 and the continuous extrusion process of Fig. 5. Wessels et al. teaches articles in which a surface fastener is formed by passing a substrate S through a continuous injection molding or extrusion apparatus to form a continuous web that includes continuous fastener regions surrounded on one or two sides in the cross direction by the substrate S. In other words, the fastener regions are provided in the form of continuous stripes that extend along the length of the web.

Although the assertion has been made that the difference between "a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate" and the continuous stripes of polymer taught by Wessels et al. is a mere matter of design choice, no compelling support or reasoning is provided for that conclusory assertion and Wessels has no teaching on how or why to obtain such a construction.

A change from the continuous stripes of Wessels et al. to the discrete patches of the claimed invention is a change in the basic properties of the different polymeric regions. The basic nature of the differences in the proposed change is demonstrated by the fact that the entire disclosure of Wessels et al. is focused on how to form continuous stripes of polymer hooks. No part of the disclosure of Wessels et al. teaches or suggests that the apparatus and methods disclosed therein could be used to provide "discrete patches" as recited in each of independent claims 71, 83, 94, and 109-113.

In view of the foregoing comments, Applicants respectfully submit that a *prima facie* case of obviousness has not been established with respect to claims 109, 111, 114, and 115 over Wessels et al.

B. Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are patentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531)

The arguments above relative to Wessels et al alone are equally applicable to this combination of Wessels et al with Allen et al.

Independent claims 71, 83, 94, and 109-113 all recite an article including a plurality of discrete polymeric regions on the first major side of the substrate, wherein each discrete polymeric region of the plurality of polymeric regions comprises a discrete patch of polymer having a perimeter that is entirely bordered or surrounded by the first major side of the substrate. Independent claims 71, 83, 94, and 109-113 also require that the plurality of discrete polymeric regions are located only on the first major side of the substrate, and/or that the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate or form the second major side of the substrate. The asserted obviousness rejection of claims 71-79, 81-83, 86-90, 92-106, and 108-118 based on the combination of Wessels et al with Allen et al does not, however, address these features in any meaningful manner.

It is unclear to applicants why independent claims 71, 83 and 94 are not rejected based on Wessels et al. alone based on the examiners interpretation of Wessels et al relative to claims 109, 111 and 114-115. Claim 109 for example is identical to claim 71 except that it has the additional clarifying limitation that the polymer forming the polymeric regions "does not extend through the substrate to the second major side of the substrate". Both claims 71 and 109 require that the polymeric regions do not **"form the second major side of the substrate".** Claim 109 as such is theoretically broader than claim 71, but it is likely not possible that the polymeric regions could extend through the substrate to the second major side of the substrate without forming the second major side of the substrate.

The teachings of Allen et al appear to be directed to substituting the knit loop of Wessels et al. with a nonwoven and the use of a coextruded film in the process of Wessels et al. Applicants dependent claim 78 and independent claims 114 and 115 recite a nonwoven web. However independent claims 114 and 115 are rejected based on Wessels et al alone.

None of applicants claims recite that the polymeric regions are multilayer materials. The undersigned interprets this combination as proposing a modification to Wessels et al were the upper portion of the polymeric region 4b in Wessels et al could be a separate type of polymer than the lower substrate portion 4a, where the logic would be that this would make them different polymeric regions. However this is just speculation. Allen et al in any event is apparently being used to teach using a coextruded film in Wessels et al. Even if this combination worked it would not create the claimed invention.

Allen et al does not teach joining a coextruded film to a loop fabric in the first place. What this reference teaches (col 3 lines 46-61) is extruding an elastomeric adhesive film, stretching this elastomeric adhesive film, point bonding this elastomeric adhesive film to a nonwoven and then relaxing the laminate so the nonwoven shirrs up to form hook "catching regions". A second film can be later extruded onto the other face of the elastomeric adhesive film (the one not attached to the nonwoven) to blank the adhesive. This reference at best would suggest extruding a film onto the back of the Wessels et al laminate after it was formed, not using a coextruded melt stream as the feed polymer resin stream into the process of Wessels et al.

However even if another reference could be found that would suggest using a coextruded melt stream in Wessels et al this would not result in the claimed invention. If a coextruded melt stream were used in Wessels et al. the result would be the same. The film structure formed would still be on both faces of the substrate (i.e. pile core sheet S) and extend through the substrate, in contradiction to all of applicants claims.

A coextruded melt stream applied to Wessels et al. would also not form a simple multilayer laminated film as known in the film art. A coextruded melt stream in Wessel et al's construction would likewise be forced through the "pile core sheet S" which would inevitably mix the polymers, forming a film that more resembled a polymer blend that a simple layered

polymeric film. In any event this would still be a polymeric film that is present on both faces of the pile core sheet S and would extend through the pile core sheet S.

As mentioned above it was admitted in the Office Action of December 12, 2007 that "Wessels et al. do not teach that a second side of the substrate is free of the polymer making up the plurality of discrete polymeric regions." Office Action, p. 5, lines 2-3, December 12, 2007. However it is unclear how this missing element would be taught by Allen et al. (U.S. Patent No. 5,547,531) except for the allegation that Allen et al would teach using a coextruded melt stream or film in the process of Wessels et al.

In view of the foregoing, Applicants respectfully submit that a *prima facie* case of obviousness has not been established for claims 71-79, 81-83, 86-90, 92-106, and 108-118 based on Wessels et al. in view of Allen et al.

C. **Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are patentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781)**

These same claims were rejected over Wessels et al. and Allen et al. or over Wessels et al alone, *supra*, and Applicants traverse this rejection for the same reasons as discussed above with respect to the previous rejections.

Provost et al. is cited to provide evidence that, e.g., hooks can be integrally molded with a base, can be co-extruded with a base, or can be provided on a thin base and laminated to a different sheet to form a substrate (Office Action delivered 12 December 2007, page 6, line 16 to page 7, line 2). Applicants submit, however, that Provost et al fails to provide the above discussed elements missing from Wessels et al. or the combination of Wessels et al. and Allen et al. For example, Provost et al. fails to provide a plurality of discrete polymeric regions fused (or attached, claims 114 and 115) to the first major surface of the substrate, wherein each discrete polymeric region is entirely bordered or surrounded by the first major side of the substrate (claims 71, 83, 94, 109, and 111- 115) nor do Provost et al. teach or suggest an elastic substrate (claims 83 and 110) nor does Provost et al. teach or suggest the plurality of discrete polymeric regions are located only on the first major side of the substrate, and wherein the polymer forming

the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate or form the second major side of the substrate (claims 71, 83, 94, 109, and 111-115).

For at least the foregoing reasons, Applicants submit that a *prima facie* case of obviousness has not been established with respect to claims 71-79, 81-83, 86-90, 92-106, and 108-115 over Wessels et al. in view of Allen et al. and Provost et al.

D. Claims 85 and 107 are patentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781), further in view of Murasaki et al. (U.S. Patent No. 5,643,651)

Claim 85 depends from claim 83 and claim 107 depends from claim 106. As discussed herein, these independent claims are patentable over the combination of Wessels et al., Allen et al., and optionally Provost et al. Similarly, Murasaki et al. does not address the basic deficiencies of the combination of Wessels et al., Allen et al., and optionally Provost et al.

For at least the foregoing reasons, Applicants submit that a *prima facie* case of obviousness has not been established with respect to claims 85 and 107 over Wessels et al. in view of Allen et al., Provost et al., and Murasaki et al.

CONCLUSION

For the foregoing reasons, appellants respectfully submit that the Examiner has erred in rejecting this application. Please reverse the Examiner on all counts.

Respectfully submitted,

August 15, 2008
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CLAIMS APPENDIX

None.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.